

Notice of Allowability	Application No.	Applicant(s)
	10/045,237	KIM, JONG-SUN
	Examiner	Art Unit
	Hai L. Nguyen	2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to the amendment filed on 12/17/2004.
2. The allowed claim(s) is/are 1-27.
3. The drawings filed on 23 October 2001 are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
 Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
 Paper No./Mail Date _____.
4. Examiner's Comment Regarding Requirement for Deposit
 of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
 Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

DETAILED ACTION

Response to Amendment

1. The amendment received on 12/17/04 has been received and entered in the case.

In view of Applicant's amendments and arguments with respect to the previous prior art rejections mailed on 09/22/04, Applicant's arguments have been considered, and found persuasive, as such; the prior art rejections have been withdrawn. Therefore the case is found to be in allowance condition for the reasons as set for below.

REASON FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to disclose or fairly suggest a delay locked loop circuit (400 in instant Fig. 5), as recited in claim 1, having specific structural limitations such as a duty corrector (411) for correcting a duty of the first internal clock signal (TCLK90) and feeding an output of the duty corrector back to the clock buffer (408); a second duty corrector (410) for correcting the duty of the second internal clock signal (TCLK) and feeding an output of the second duty corrector back to the clock buffer; and being configured in combination with the rest of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose or fairly suggest a delay locked loop circuit (400 in instant Fig. 5), as recited in claims 1 and 5, having specific structural limitations such as a duty corrector (411) for correcting a duty of the first internal clock signal (TCLK90) and feeding an output of the duty corrector back to the clock buffer (408); a second duty corrector (410) for correcting the duty of the second internal clock signal (TCLK) and feeding an output of the

second duty corrector back to the clock buffer; and being configured in combination with the rest of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose or fairly suggest a delay locked loop circuit (400 in instant Fig. 5), as recited in claims 14 and 20, having specific structural limitations such as a first mixer (404) for generating a first clock signal (CLK0) in response to the plurality of basic clock signals (REF_CLK); a second mixer (405) for generating a second clock signal (CLK90) which is 90 degrees out-of-phase with the first clock signal in response to the plurality basic clock signals; and being configured in combination with the rest of the limitations of the base claim and any intervening claims.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai L. Nguyen whose telephone number is 571-272-1747 and Right Fax number is 571-273-1747. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The official fax phone number for the organization where this application or proceeding is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1562.

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HLN 
January 13, 2005